

During March 2013, the following changes in inventory item F555 took place:

<i>Date</i>		<i>Explanation</i>	<i>Units</i>	<i>Unit Cost</i>
March	1	Balance	800	10
	9	Purchased	200	2
	18	Purchased	500	5
	10	Sold	900	

Perpetual inventories are maintained.

**Required:**

What is the cost of sales and ending inventory for item F555 under the following methods?

(Show calculations.)

1- FIFO.

2- LIFO.

3- The weighted average.

**Answer:**

**1. FIFO:**

$$\text{Cost of sales} = (800 \times 10) + (100 \times 2) = \$8,200$$

$$\text{Cost of ending inventory} = (100 \times 2) + (500 \times 5) = \$2,700$$

**2. LIFO:**

$$\text{Cost of sales} = (200 \times 2) + 700 \times 10 = \$7,400$$

$$\text{Cost of ending inventory} = (100 \times 10) + (500 \times 5) = \$3,500$$

**3. Weighted average:**

$$\text{Average cost per unit} = [(800 \times 10) + (200 \times 2)] \div (800 + 200) = \$8.4$$

$$\text{Cost of sales} = 900 \times 8.4 = \$7,560$$

$$\text{Cost of ending inventory} = 600 \times 5.57^* = \$3,342$$

$$^* [(100 \times 8.4) + (500 \times 5)] \div (100 + 500) = 5.57\$$$

**Question 2:**

Ahmed started a business on 1<sup>st</sup> January 2017 selling printers. He bought 1000 printers at a cost of \$80 each at the beginning of his accounting year. On May 1<sup>st</sup> 2016 he bought a further 350 printers, but the cost had risen by this stage from \$80 to \$120. At the accounting year end on 31<sup>st</sup> December 2017, Ahmed had 250 printers in inventory. He sold the others during the year for \$200 each.

**Required:** Calculate the value of Ahmed's inventory on 31<sup>st</sup> December 2017 using:

- a. FIFO
- b. LIFO
- c. Calculate Gross profit

**Answer:**

**a. Inventory valuation Under FIFO Method:**

Inventory In hand  $(250 \times \$120) = \$30,000$

Cost of first purchase of printers  $(1000 \times \$80) = \$80,000$

Cost of second purchase of printers  $(350 \times \$120) = \$42,000$ ,

So Total Cost =  $\$80,000 + \$42,000 = \$122,000$

Cost of Goods sold =  $\$122,000 - \$30,000 = \$92,000$

**b. Inventory valuation Under LIFO Method:**

Inventory In hand  $(250 \times \$80) = \$20,000$

Cost of first purchase of printers  $(1000 \times \$80) = \$80,000$

Cost of second purchase of printers  $(350 \times \$120) = \$42,000$ ,

So Total Cost =  $\$80,000 + \$42,000 = \$122,000$

Cost of Goods sold =  $\$122,000 - \$20,000 = \$102,000$

	FIFO	LIFO
Sales Revenue $(1100 \times 200)$	220,000	220,000
Less: Cost of Sales	(92,000)	(102,000)
Gross Profit	128,000	118,000

## HOMEWORK

**Question 3:**

Ahmed started a business on 1<sup>st</sup> January 2016 selling printers. He bought 10,000 printers at a cost of \$800 each at the beginning of his accounting year. On May 1<sup>st</sup> 2016 he bought a further 3000 printers, but the cost had risen by this stage from \$800 to \$1000. At the accounting year end on 31<sup>st</sup> December 2016, Ahmed had 1500 printers in inventory. He sold the others during the year for \$2000 each.

**Required:**

Calculate the value of Ahmed's inventory on 31<sup>st</sup> December 2016 using:

- a. FIFO
- b. LIFO

